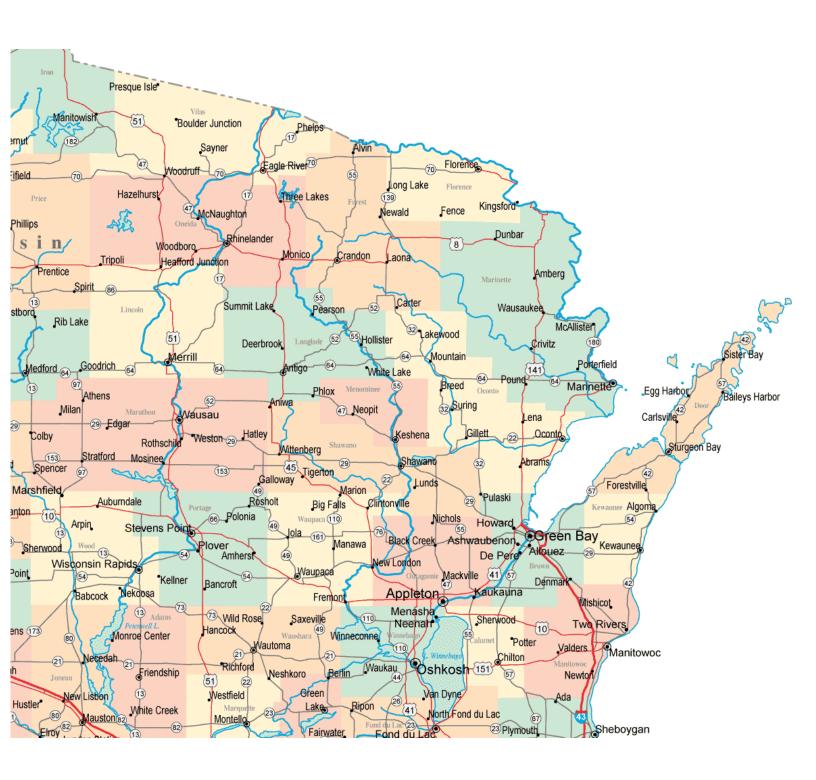
## **MORNING TORNADO GUIDE (1950-2015)**

## FOR NORTH CENTRAL AND NORTHEAST WISCONSIN



| EVENT | F/EF | DATE  |     | TIME |           | TOR IN GRB SERVICE AREA             |                           |
|-------|------|-------|-----|------|-----------|-------------------------------------|---------------------------|
| #     | RANK | MONTH | DAY | YEAR | (LST)     | DIRECTION / LOCATION                | COUNTY OR COUNTIES        |
|       |      |       |     |      |           |                                     |                           |
| 1     | 2    | 6     | 20  | 1954 | 230-240   | Rothschild to 6 NE Mosinee          | Marathon                  |
| 2     | 2    | 6     | 20  | 1954 | 0400      | Brothertown                         | Calumet                   |
| 3     | 1    | 5     | 4   | 1959 | 1030      | Wausau                              | Marathon                  |
| 4     | 1    | 5     | 4   | 1959 | 1145      | Deerbrook                           | Langlade                  |
| 5     | 2    | 5     | 6   | 1959 | 0320      | Symco to 3 SE Clintonville          | Outagamie, Waupaca        |
| 6     | 2    | 9     | 3   | 1961 | 0010      | Fenwood                             | Marathon                  |
| 7     | 1    | 9     | 3   | 1961 | 0100      | Athens                              | Marathon                  |
| 8     | 1    | 7     | 1   | 1967 | 0045      | 3 E Kiel                            | Manitowoc                 |
| 9     | 2    | 6     | 30  | 1968 | 0400      | 3 NW Cavour                         | Forest                    |
| 10    | 1    | 6     | 30  | 1968 | 0445      | 3 S Pembine                         | Marinette                 |
| 11    | 1    | 12    | 1   | 1970 | 0700      | Hull                                | Portage                   |
| 12    | 2    | 12    | 1   | 1970 | 0900      | 12 SE Marshfield                    | Wood                      |
| 13    | 2    | 12    | 1   | 1970 | 0945-1030 | 4 NW Iola - Pella                   | Shawano, Langlade, Oconto |
| 14    | 3    | 12    | 1   | 1970 | 1010-1045 | near Medina - Rose Lawn             | Outagamie, Shawano        |
| 15    | 1    | 7     | 8   | 1971 | 0200      | Wisconsin Rapids                    | Wood                      |
| 16    | 0    | 7     | 30  | 1971 | 0700      | 4 E Oshkosh (waterspout)            | Winnebago                 |
| 17    | 1    | 3     | 11  | 1973 | 1030      | 2 E Calumetville                    | Calumet                   |
| 18    | 1    | 6     | 18  | 1973 | 1100      | 2 W Athens                          | Marathon                  |
| 19    | 1    | 7     | 12  | 1973 | 0300      | Boulder Junction - Sayner           | Vilas                     |
| 20    | 1    | 7     | 12  | 1973 | 0730      | Jacksonport                         | Door                      |
| 21    | 1    | 7     | 12  | 1973 | 0800      | 4 W Freedom                         | Outagamie                 |
| 22    | 2    | 6     | 16  | 1979 | 0930      | Oconto Falls - 2 NE Lena            | Oconto                    |
| 23    | 1    | 8     | 4   | 1979 | 1000      | Manitowoc                           | Manitowoc                 |
| 24    | 2    | 6     | 7   | 1980 | 0020      | Valders                             | Manitowoc                 |
| 25    | 1    | 7     | 5   | 1980 | 0030      | Valders                             | Manitowoc                 |
| 26    | 2    | 4     | 4   | 1981 | 0035      | 4 W Kiel                            | Calumet                   |
| 27    | 1    | 7     | 3   | 1983 | 0439      | Eagle River                         | Vilas                     |
| 28    | 0    | 4     | 27  | 1984 | 0405      | Saratoga                            | Wood                      |
| 29    | 0    | 7     | 28  | 1991 | 1015      | Near Rock Island (waterspout)       | Door                      |
| 30    | 0    | 7     | 28  | 1991 | 1015      | Near Washington Island (waterspout) | Door                      |
| 31    | 0    | 6     | 29  | 1995 | 1105      | 10 SW Kewaunee                      | Kewaunee                  |
| 32    | 2    | 8     | 7   | 1996 | 0145-0149 | 6.5 N Stratford - 2.5 NNW Fernwood  | Marathon                  |
| 33    | 1    | 8     | 7   | 1996 | 0146-0147 | 1 N - 1.2 NE Stratford              | Marathon                  |
| 34    | 1    | 8     | 7   | 1996 | 0219-0221 | 0.4 SW Shantytown - Shantytown      | Marathon                  |

| EVENT | F/EF | DATE  |     |      | TIME      |  | TOR IN GRB SERVICE AREA  |
|-------|------|-------|-----|------|-----------|--|--------------------------|
| #     | RANK | MONTH | DAY | YEAR | (LST)     | DIRECTION / LOCATION                       | COUNTY OR COUNTIES       |
|       |      |       |     |      |           |  |                          |
| 35    | 0    | 5     | 31  | 1998 | 0020-0021 | 4 WSW Mosinee                              | Marathon                 |
| 36    | 1    | 5     | 31  | 1998 | 0120-0124 | 0.5 N Stockbridge - 2 NE Stockbridge       | Calumet                  |
| 37    | 0    | 6     | 8   | 2003 | 1140      | 4 W Oshkosh - Wittman Field                | Winnebago                |
| 38    | 0    | 5     | 23  | 2004 | 0547      | 2.7 E Reedsville                           | Manitowoc                |
| 39    | 0    | 9     | 29  | 2006 | 0920-0955 | Chambers Is 12 SE Cedar River (waterspout) | Door                     |
| 20    | 1    | 8     | 7   | 2013 | 0005-0010 | 0.5 SSE Henrysville – 1 NE Stangelville    | Brown, Calumet, Kewaunee |

#### Event 1: June 20, 1954

The F/EF-2 tornado developed around 2:30 am CST in Rothschild in Marathon County. The tornado travelled approximately 6.3 miles and dissipated six miles northeast of Mosinee around 2:40 am CST. The maximum width of the tornado was 70 yards. Another tornado was reported in Brothertown in Calumet County around 4 am CST.

#### Event 2: June 20, 1954

The F/EF-2 tornado developed around 4 am CST in Brothertown in Calumet County. The tornado travelled one mile and had a maximum width of less than 50 yards.

#### Event 3: May 4, 1959

The F/EF-1 tornado was reported to touch down near Wausau in Marathon County around 10:30 am CST. The tornado was 200 yards wide and travelled a mile before dissipating near Wausau.

#### Event 4: May 4, 1959

The F/EF-1 tornado struck Deerbrook in Langlade County around 11:45 am CST. The tornado was 100 yards wide and was on the ground for a mile.

### Event 5: May 6, 1959

The F/EF-2 tornado developed near Symco in Waupaca County and travelled a little over 7 miles to three miles southeast of Clintonville in Outagamie County around 3:20 am CST. A second tornado hit Outagamie County later that afternoon.

#### Event 6: September 3, 1961

The F/EF-2 tornado touched down near Fenwood in Marathon County around 12:10 am CST and travelled about 2 miles. The tornado was 35 yards wide. Damage was confined to farm buildings and crops in rural western Marathon County.

#### Event 7: September 3, 1961

The F/EF-1 tornado touched down near Athens in Marathon County around 1 am CST. The tornado was 35 yards wide and was on the ground for 2 miles.

#### Event 8: July 1, 1967

The F/EF-1 tornado struck 3 miles east of Kiel in Manitowoc County around 12:45 am CST. The tornado was 50 yards wide and travelled a half mile before dissipating.

#### Event 9: June 30, 1968

The F/EF-2 tornado touched down 3 miles northwest of Cavour in Forest County around 4 am CST. The tornado travelled east northeast approximately one mile and had a maximum width of 200 yards. Several buildings were damaged on the Aschenbrenner Farm near Cayour.

#### Event 10: June 30, 1968

The F/EF-1 tornado touched down on the Zern property 3 miles south of Pembine in Marinette County around 4:45 am CST. The tornado was 100 yards wide and travelled on the ground for a half mile. Trees and a garage were destroyed by the tornado.

## **Event 11: December 1, 1970**

A rare tornado event occurred across north central and northeast Wisconsin on this date. In all, there were four tornadoes on this date, including an F/EF-3. What made this event even more unusual was the time of day with all four tornadoes reported between 7 am and 10:45 am in the morning. The F/EF-1 tornado touched down on the Richard Rutta farm in the town of Hall north of Stevens Point in Portage County. The tornado was 200 yards wide and travelled nearly 3 miles before dissipating.

#### **Event 12: December 1, 1970**

Four rare December tornadoes were reported on this date across north-central and northeast Wisconsin. The F/EF-2 tornado touched down in Wood County 12 miles southeast of Marshfield or two miles southeast of Arpin on the Fred Cahler farm around 9 am CST. The tornado travelled 2 miles while reaching a maximum width of 200 yards before dissipating. Several farm buildings were destroyed or damaged on the Fred Cahler farm. The tornadoes on this day are on the only December tornadoes recorded in the NWS Green Bay Service area.

#### **Event 13: December 1, 1970**

Four rare and only December tornadoes were reported on this date across north central and northeast Wisconsin. The F/EF-2 tornado touched down with severe damage around 9:45 am CST on the Heschke farm 4 miles northwest of Iola in Waupaca County. The tornado moved east for 28 miles across Waupaca County into Shawano County before dissipating in Pella around 10:30 am CST. The maximum width of the tornado was 200 yards. Additional damage occurred in the Marion and Pella areas. A lady and her three small children escaped injury when their mobile home was lifted up by the tornado and exploded with debris scattered over the field.

#### **Event 14: December 1, 1970**

The F/EF-3 tornado developed around 10:15 am CST near Medina in Outagamie County. The tornado moved northeastward at approximately 50 mph; destroying about twenty barns and five homes. The tornado caused additional property damage along a track from Medina to Black Creek and beyond to near County Trunk C in southeastern Shawano County. The tornado was 200 yards wide and dissipated around 10:45 am CST near Rose Lawn in Shawano County. Damage to farm buildings was estimated at \$500,000 dollars. Damage to a transmission line a mile and a half east of Stephensville was estimated at \$100,000.

#### Event 15: July 8, 1971

The F/EF-1 tornado moved through open country just north of Wisconsin Rapids in Wood County around 2 am CST. The tornado was 75 yards wide and travelled about two miles before it dissipated. One house trailer moved off its foundation while there was damage to trees in the area.

#### Event 16: July 30, 1971

Numerous waterspouts (F/EF-0) were reported about 4 miles east of Oshkosh in Winnebago County around 7 am CST. The waterspouts formed east of Oshkosh as cold air with large cyclonic vorticity moved over the warm lake according to the monthly storm report.

#### Event 17: March 11, 1973

An early season F/EF-1 struck Calumet County, 2 miles east of Calumetville around 10:30 am CST. The tornado was 50 yards wide and travelled two miles before dissipating.

#### Event 18: June 18, 1973

The F/EF-1 tornado touched down on the Brunke Farm 2 miles west of Athens in Marathon County around 11 am CST. The tornado was 200 yards wide and travelled east for two miles before dissipating.

#### Event 19: July 12, 1973

The F/EF-1 tornado was struck touchdown just south of Boulder Junction in Vilas County around 3 am CST. The tornado was 100 yards wide and travelled 19.5 miles before dissipating near Sayner in Vilas County. Scattered damage to the woods was reported along the path of the tornado.

#### Event 20: July 12, 1973

The F/EF-1 tornado touched down in Jacksonport in Door County around 7:30 am CST. The tornado was 100 yards wide and travelled 3 miles. Scattered damage was reported west and south of Jacksonport. As many as six waterspouts were reported by one observer off Jacksonport. A seiche caused a drop of two feet in water level locally about fifteen minutes after passage of the storms

#### Event 21: July 12, 1973

The F/EF-1 tornado developed 4 miles west of Freedom in Outagamie County around 8 am CST. The tornado was 100 yards wide and travelled one mile. Farm buildings were destroyed on the Ken Geiger farm 4 miles west of Freedom.

#### Event 22: June 16, 1979

The F/EF-2 tornado developed near Oconto Falls in Oconto County around 9:30 am CST. The tornado travelled just over 15 miles and reached a maximum width of 100 yards before dissipating 2 miles northeast of Lena. At least 17 frame and mobile homes along with numerous barns were damaged or destroyed. Heavy rains and large hail accompanied the tornado destroying crops along the thunderstorm path.

#### Event 23: August 4, 1979

The tornado (F/EF-1) struck near Manitowoc in Manitowoc County around 10 am CST. Several buildings on a farm were destroyed. There was no documentation on path length or width of the tornado.

#### Event 24: June 7, 1980

A brief F/EF-2 tornado touched down in Valders in Manitowoc County around 12:20 am CST. The tornado was less than 50 yards wide and was on the ground for less than a quarter of a mile. The brief touchdown resulted in the destruction of a large modern barn and heavy farm equipment. Field crops were beaten down in the vicinity of the storm.

#### Event 25: July 5, 1980

The F/EF-1 tornado struck the farm of Warren Otto just south of Valders in Manitowoc County around 12:30 am CST. There was no documentation on path length or width of the tornado. The tornado destroyed a barn and machine shed, and farm machinery on the Warren Otto farm. Other farm buildings in the area also sustained minor damage.

### Event 26: April 4, 1981

A brief F/EF-2 tornado touched down around 12:35 am CST 4 miles west of Kiel in Calumet County. The tornado was only 25 yards wide and travelled about a quarter of a mile. Six trailers in a line in the Country Aire Trailer Court were destroyed. One trailer was lifted into the air and deposited upside down.

## Event 27: July 3, 1983

The Eagle River Municipal Airport in Vilas County was hit by the F/EF-1 tornado at 4:39 am CST. The tornado was 20 yards wide and travelled a half mile before dissipating. Two single engine planes were destroyed and thirteen others were damaged. Five eighths inch ropes holding the planes down were shredded. One plane cart wheeled four hundred feet.

#### Event 28 April 27, 1984:

The F/EF-0 tornado briefly touched down in the township of Saratoga in Wood County around 4:05 am CST. The tornado was 50 yards wide and travelled a mile before dissipating. Numerous trees were downed and some residential damage occurred. Hail the size of three quarters of an inch also fell during the storm.

#### Event 29: July 28, 1991

A waterspout was reported near Rock Island across extreme northern Door County at 10:15 am CST. A second waterspout was reported near Washington Island.

### Event 30: July 28, 1991

A waterspout was reported near Washington Island across extreme northern Door County around 10:15 am CST. A second waterspout was reported near Rock Island around the same time.

#### Event 31: June 29, 1995

The F/EF-0 tornado touched down 10 miles southwest of Kewaunee in Kewaunee County around 11:05 am CST. The tornado was 10 yards wide and travelled a tenth of a mile. The weak tornado touched down only for a few seconds in southern Kewaunee County. Minimal crop damage was reported since this brief tornado occurred in open rural country. The tornado appeared to form on the Lake Michigan lake breeze.

### Event 32: August 7, 1996

The F/EF-2 tornado touched down six and a half miles north of Stratford in Marathon County around 1:45 am CST, tearing the top portion of a home off, flattened a garage, and snapped off several large trees. The tornado continued east northeast for two and a half miles and reached a maximum width of 200 yards before dissipating two and a half miles north northwest of Fenwood around 1:49 am CST. As the storm moved east, there was damage to a storage shed and thirty trees on a farm. A dozen of Ginseng shelters were thrown about. The tornado was not on the ground for the entire path.

#### Event 33: August 7, 1996

A brief F/EF-1 tornado touched down one mile north of Stratford in Marathon County around 1:46 am CST. The tornado was 100 yards wide and only travelled two tenths of a mile before dissipating 1.2 miles northeast of Stratford round 1:47 am CST. The tornado snapped off numerous large trees, some of which fell on the top of homes. In addition: a barn was flattened, a semi-trailer was flipped over and a car moved 75 feet.

### Event 34: August 7, 1996

The F/EF-1 tornado touched down four tenths of a mile southwest of Shantytown in Manitowoc County around 2:19 am CST. The tornado was 100 yards wide and travelled nearly a half mile to Shantytown before dissipating around 2:21 am CST. The tornado tore a 100 yard swath through a cornfield. In Shantytown, the tornado tore the roof and garage off a home. Pieces of the roof were found one-quarter of a mile away from the home.

#### Event 35: May 31, 1998

A brief F/EF-0 tornado touched down 4 miles west southwest of Mosinee in Marathon County at 12:20 am CST. The tornado was 50 yards wide and was on the ground for two tenths of a mile before it dissipated 3.8 miles west southwest of Mosinee at 12:21 am CST.

### Event 36: May 31, 1998

The tornado developed a half mile north of Stockbridge in Calumet County around 1:20 am CST. The F/EF-1 tornado was 75 yards wide and travelled 1.4 miles before dissipating 2 miles northeast of Stockbridge around 1:24 am CST. The tornado destroyed a garage and silo, damaged two barns and overturned farm vehicles. A 2-by-4 was driven through the exterior wall of a house, narrowly missing one of the sleeping children.

#### Event 37: June 8, 2003

A waterspout (F/EF-0) was reported 4.3 miles west of Brothertown in Calumet County at 12:42 pm CST. The waterspout was 40 yards wide and travelled four tenths of a mile before dissipating 4.1 miles west southwest of Brothertown at 12:46 pm CST.

### Event 38: May 23, 2004

The F/EF-0 tornado touched down 2.7 miles east of Reedsville in Manitowoc County at 5:47 am CST. The tornado was 75 yards wide and was on the ground for a tenth of a mile. The tornado damaged shingles and siding on a house and snapped trees and large branches.

### **Event 39: September 29, 2006**

A waterspout (F/EF-0) was reported off Door County, from Chambers Island to 12 miles southeast of Cedar River, Michigan around 9:20 am CST. The last report of the waterspout was around 9:55 am CST.

#### Event 40: August 7, 2013

The last tornado of the night to strike Northeast Wisconsin on this date, the (F/EF-1) tornado touched down a half mile south southeast of Henrysville in Brown County around 12:05 CST. The tornado was travelling at a rate of 60 to 70 mph as it moved across the region. A couple dozen trees were damaged or uprooted. In Brown County, the maximum width of the tornado was one hundred yards with an average width of seventy-five yards. The tornado (EF-1) moved into Kewaunee County about three miles southwest of Pilsen around 12:06 am CST. The tornado caused the walls and roof of a barn to collapse and damaged two silos. The tornado also uprooted several dozen trees along its path. In Kewaunee County, the maximum width of the tornado was 100 yards with an average width of seventy-five yards. The tornado travelled 5.6 miles before dissipating one mile northeast of Stangelville around 12:10 am CST.

## Rare Late Evening / Early Morning Tornadoes on August 6-7, 2013

